

08/12/03

And H/A

AMENDMENTS TO THE CLAIMS

In accordance with the PTO's revised amendment format, a detailed listing of all claims has been provided. A status identifier is provided for each claim in parentheses following each claim number.

In the Claims:

Claims 1-31 were previously pending.

No claims are amended.

No new claims are added.

Claims 1-31 are pending.

AI 1. (Unchanged) A method of reclaiming resources used by computer application programs executing on a computer, the method comprising:

identifying computer application programs executing on the computer;
assigning a priority value to each of the identified computer application programs, wherein the priority value is determined based on a plurality of characteristics of the identified computer application programs; and
automatically terminating the computer application program with the smallest priority value.

2. (Unchanged) A method as recited in claim 1, further comprising:
if the computer application program with the smallest priority value is in a modal state in which it waits for a response from a user, then providing a

default response to the computer application prior to terminating the computer application program.

3. (Unchanged) A method as recited in claim 1, further comprising:
identifying computer application programs executing on the computer that are core applications, wherein core applications are not terminated, regardless of priority value.

AI 4. (Unchanged) A method as recited in claim 1, further comprising:
if the computer application program with the smallest priority is in a modal state in which it waits for a response from a user, then providing a default response to the computer application prior to terminating the computer application program, wherein the default response is provided to the computer application program in lieu of a response from a user, and wherein the default response takes the application program out of its modal state. ✓

5. (Unchanged) A method as recited in claim 1, wherein each characteristic of the identified computer application programs has an associated weighting factor indicating the importance of the characteristic.

6. (Unchanged) A method as recited in claim 1, wherein the characteristics of the identified computer application programs include average launch times for the computer application program.

7. (Unchanged) A method as recited in claim 1, wherein the parameters characteristics of the identified computer application programs include average memory usages of the computer application programs. 8. 8. ?

8. (Unchanged) A method as recited in claim 1, wherein the parameters characteristics of the identified computer application programs include classes associated with the computer application programs.

A/ 9. (Unchanged) A method as recited in claim 1, wherein the parameters characteristics of the identified computer application programs include frequencies of usage of the computer application programs.

10. (Unchanged) A method as recited in claim 1, wherein the parameters characteristics of the identified computer application programs include the amounts of data stored on the computer by the computer application programs.

11. (Unchanged) A method as recited in claim 1, further comprising:
assigning values to the characteristics of the identified computer application programs;

wherein the priority value for a particular computer application program is determined by adding together the characteristic values of the particular computer application program.

12. (Unchanged) A method as recited in claim 1, wherein the computer is a palmtop computing device.

13. (Unchanged) One or more computer-readable memories containing a computer program that is executable by a processor to perform the method recited in claim 1.

A1

14. (Unchanged) A method of terminating a computer application program executing on a computer, the method comprising:

determining whether the computer application program being terminated is in a modal state in which it waits for a response from a user;

if the computer application being terminated is in a modal state, then providing a default response to the computer application program in lieu of a response from a user, wherein the default response takes the computer application program out of its modal state; and

terminating the computer application program.

15. (Unchanged) A method as recited in claim 14, wherein the step of providing the default response to the computer application program is repeated until the computer application program being terminated is in a non-modal state, prior to performing the terminating step.

16. (Unchanged) A method as recited in claim 14, wherein an operating system executing on the computer instructs the computer application to generate its own default response.

17. (Unchanged) A method as recited in claim 14, wherein an operating system executing on the computer provides the default response to the computer application.

AI 18. (Unchanged) A method as recited in claim 14, wherein an operating system executing on the computer provides the default response to the computer application, and wherein the operating system receives the default response from the computer application when the computer application is launched.

19. (Unchanged) One or more computer-readable media having stored thereon a computer program comprising the following steps:

identifying application programs executing on a computer;

assigning a priority value to each of the identified application programs, wherein the priority value is determined based on a plurality of characteristics of the identified application programs; and

automatically terminating the application program with the smallest priority value.

20. (Unchanged) One or more computer-readable media as recited in claim 19, further:

if the application program with the smallest priority value is in a modal state in which it waits for a response from a user, then providing a default response to the application program prior to terminating the application program.

21. (Unchanged) One or more computer-readable media as recited in claim 19, further:

identifying application programs executing on the computer that are core applications, wherein core applications are not terminated, regardless of priority value.

22. (Unchanged) One or more computer-readable media as recited in claim 19, further:

AI
if the application program with the smallest priority value is in a modal state in which it waits for a response from a user, then providing a default response to the application program prior to terminating the application program, wherein the default response is provided to the application program in lieu of a response from a user, and wherein the default response takes the application program out of its modal state.

23. (Unchanged) One or more computer-readable media as recited in claim 19, wherein each characteristic of the identified computer application programs has an associated weighting factor indicating the importance of the characteristic.

24. (Unchanged) One or more computer-readable media as recited in claim 19, further:

assigning values to the characteristics of the identified application program;

wherein the priority value for a particular application program is determined by adding together the characteristic values of the particular application program.

25. (Unchanged) One or more computer-readable media as recited in claim 19, wherein the characteristics of the identified computer application programs include one or more of the following characteristics:

average launch times for the application programs;
average memory usages of the application programs;
classes associated with the application programs;
frequencies of usage of the application programs; and
amounts of data stored by the application programs.

A1

26. (Unchanged) An apparatus comprising:

one or more processors;

at least two application programs that are executed concurrently by the one or more processors; and

an operating system that is executed by the processor;

wherein the operating system is configured to assign a priority value to each application program being executed by the processor, and further configured to automatically terminate the computer application program with the smallest priority value.

27. (Unchanged) An apparatus as recited in claim 26 wherein the operating system is configured to identify application programs that are core applications, and wherein core applications are not terminated, regardless of priority value.

28. (Unchanged) An apparatus as recited in claim 26 wherein:
the application program provides a default response to the operating system when entering a modal state in which it will wait for user input; and
the operating system is further configured to provide the default response to a particular application program in lieu of user input prior to terminating the particular application program.

29. (Unchanged) An apparatus as recited in claim 26 wherein the application termination module is further configured to provide a default response prior to terminating an application program in a modal state.

30. (Unchanged) An apparatus as recited in claim 26 wherein the application termination module is further configured to determine the priority value assigned to each application program by evaluating a plurality of parameters associated with each application program.

31. (Unchanged) An apparatus as recited in claim 26 wherein the application termination module is further configured to calculate the priority value associated with a particular application program by adding together the values of all parameters associated with the particular application program.
